



MEMORANDUM

To: Mayor and Council

From: Sondra Creighton, P.E., Director
Public Works Department

Date: August 18, 2006

Subject: Lakewood Drive at RM 2222

The Texas Department of Transportation (TxDOT) is proposing to construct a new bridge on RM 2222 at the location where RM 2222 crosses Bull Creek at the low-water crossing. RM 2222 is frequently closed during heavy rain because Bull Creek floods the road, the bridge will elevate RM 2222 above the 100-year flood plain and allow continuous access on RM 2222 at times of heavy rain. Since RM 2222 will be higher than it is currently, a ramp will be required to connect RM 2222 to the existing Lakewood Drive. Currently, Lakewood Drive connects to RM 2222 allowing area residents access to and from RM 2222 and other citizens to access Bull Creek Park.

Representatives of the Lakewood Club Homeowners Association have suggested that, in conjunction with the TxDOT bridge project, Lakewood Drive be closed at the intersection of RM 2222. Together with the closure of Lakewood Drive it was suggested that Far West Boulevard be extended, from its current termination at the intersection of Ladera Norte, to RM 2222, to provide an alternative route. This extension of Far West Boulevard was at one time included in City's Long Range Transportation Plan but was removed from the plan in the late 80's, at the same time the section of Far West Boulevard between Mesa Drive and RM 2222 was deleted as an arterial roadway.

Both Public Works Department staff and the residents in this area have concerns with extending Far West Boulevard to RM 2222 as it would significantly increase traffic in the neighborhood, including past Doss Elementary School and Murchison Middle School, as Far West Boulevard would connect Loop 1 with RM 2222. The estimated cost of the extension of Far West Boulevard \$15.7 million, there is currently no funding available, additional construction would be necessary to widen RM 2222 to accommodate turn lanes and address safety issues. A further idea was presented by a neighborhood representative to allow a single right-turn connection from westbound RM 2222 into Lakewood Drive.

TxDOT has reviewed all of the alternatives and these are the 4 options that TxDOT considers feasible for this project:

1. The project as conceptually designed, with RM 2222 elevated with the bridge and the ramp connection to the Lakewood Drive, providing a fully operational intersection.
2. RM 2222 elevated with the bridge but without the ramp connection to Lakewood Drive. Lakewood Drive would become a dead end at RM 2222.
3. RM 2222 elevated with the bridge, and providing a westbound right turn lane only to Lakewood Drive. A ramp connection to Lakewood Drive would be needed but vehicle movements would be limited to right-in. This would permit access for emergency vehicles from AFD Station 31.
4. Similar to Option #3 but the access to Lakewood Drive would be restricted to emergency vehicles only. The entry from RM 2222 would be gated.

The Public Works Department recommendation is to support the current TxDOT design (Option 1), where modifications were made to their original design to accommodate the interest of the citizens to the extent possible, for the following reasons:

- City Policy and the Public Works Department position is to not close roadways because this reduces connectivity and the number of routes citizens have available for travel.
- Closing this connection would shift traffic to other adjacent neighborhood streets in this area and increase traffic on other roadways.
- There is not an identified problem in keeping the Lakewood Drive access to RM 2222 open. Data collected in April 2005 on Lakewood Drive, a neighborhood collector, showed volumes of 2210 vehicles per day, with no significant cut through traffic.
- Lakewood Drive serves as an access route to the public Bull Creek Park. Closing the access would reduce accessibility for the public to Bull Creek Park.

The Austin Fire Department has confirmed their position that they cannot support the permanent closure of Lakewood Drive at RM 2222 if there is no alternative access into the neighborhood.

Both AFD and EMS want to have as many access options as possible for emergency response. Closing Lakewood Drive at RM 2222 will increase the response times from Station 31 (see attached map), the next shortest alternative route is via Lakewood Drive from Loop 360. However there is also a low-water crossing in Bull Creek Park, where Lakewood Drive crosses Bull Creek that frequently floods during rain events and would limit access to the Lakewood area from Loop 360. Watershed Protection and Development Review Department is investigating a low-water bridge that would allow access during some of the more frequent rain events but Lakewood Drive would still flood during more significant rainfall.

The proposal to have emergency vehicles pass under the new 2222 bridge wouldn't work as the road would flood during storm events, and there is insufficient headroom for AFD's emergency vehicles.

AFD has provided the following information regarding the travel times from fire stations to a location in the middle of this neighborhood, these are computed travel times and do not include the time for 911 call-taking, dispatch, or turn-out:

Currently from Fire Station 31, via Lakewood Drive: 1.62 minutes

With Lakewood Drive closed at RM 2222:

- From Fire Station 31 via Loop 360 and Lakewood: 4.35 minutes
(requires crossing Bull Creek at the park)
- From Fire Station 31 via RM 2222, Mesa, and Far West: 10 minutes
- From Fire Station 19 (at Balcones and Parkcrest)
via Dry Creek, Mesa and Far West: 9.11 minutes
- From Fire Station 21 (at Spicewood Springs and Mesa)
via Mesa and Far West: 5.7 minutes
- From Fire Station 33 (on Bluegrass, in Great Hills w of 360)
via Bluegrass, Loop 360 and Lakewood: 9.91 minutes
(requires crossing Bull Creek at the park)

In conclusion, staff recommends Option 1 to preserve shorter response times and maintain connectivity. However, if the decision is made to close the connection from Lakewood Drive to RM 2222, then Public Works staff recommends complete closure with a turn-around at the closed end of Lakewood Drive (Option 2). The partial closure options (TxDOT Options 3 and 4) that require a one-way off-ramp can create potential 'wrong-way' traffic conflicts where two-way access is provided for the properties abutting Lakewood Drive between Driftwood Drive and RM 2222 and for other traffic in the area, including users of Bull Creek Park, resulting in operational and safety problems.



Sondra Creighton, P.E., Director
Public Works Department

xc: Toby Hammett Futrell
Laura Huffman
Rudy Garza